

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.)

DOCKET NO. 2008-0070

For Approval to Commit Funds in)
Excess of \$2,500,000 (Excluding)
Customer Contributions) for Item)
Y00119, Kaloi Substation, Kaloi)
Transformers #1 and #2, and 46kV)
and 12kV Circuits.)

DECISION AND ORDER

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DIV. OF CONSUMER ADVOCACY
DEPT. OF COMMERCE AND
CONSUMER AFFAIRS
STATE OF HAWAII

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Y00119, Kaloi Substation, Kaloi)
Transformers #1 and #2, and 46kV)
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DECISION AND ORDER

By this Decision and Order, the commission approves HAWAIIAN ELECTRIC COMPANY, INC.'s ("HECO") request to commit approximately \$14.3 million (excluding customer contributions) for the purchase, construction, and installation of Item Y00119, the Kaloi Substation, Kaloi Transformers #1 and #2, associated 46kV and 12kV circuits, and related equipment, easements, and land (collectively, the "Proposed Project"), pursuant to Paragraph 2.3.g.2 of General Order No. 7, Standards for Electric Utility Service in the State of Hawaii ("General Order No. 7"), as revised. The commission also determines that it is appropriate for HECO to construct the 46kV subtransmission lines above and below the surface of the ground, as proposed in its application filed on April 18, 2008, under Hawaii Revised Statutes ("HRS") § 269-27.6(a).

I.

Background

HECO, a Hawaii corporation, is a public utility as defined by HRS § 269-1. HECO was initially organized under the laws of the Kingdom of Hawaii on or about October 13, 1891; and its principal place of business is located in Honolulu, Hawaii. HECO is engaged in the production, purchase, transmission, distribution, and sale of electricity on the island of Oahu in the State of Hawaii ("State").

A.

HECO's Application

On April 18, 2008, HECO filed an application ("Application") seeking commission approval to commit approximately \$14.3 million (excluding customer contributions) for the Proposed Project.¹ The Application was made pursuant to Paragraph 2.3.g.2 of General Order No. 7. In its Application, HECO also requests a commission determination that construction of the 46kV subtransmission lines above and below the surface of the ground, as proposed in its Application, is appropriate. Finally, HECO requests that the commission hold a public hearing

¹HECO served copies of the Application on the DIVISION OF CONSUMER ADVOCACY, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS ("Consumer Advocate"), an ex officio party to this proceeding pursuant to HRS § 269-51 and Hawaii Administrative Rules § 6-61-62. No persons moved to intervene or participate without intervention in this proceeding.

pursuant to HRS § 269-27.5 regarding its proposal to construct 46kV overhead subtransmission lines through a residential area.²

According to HECO, the Proposed Project is being planned to principally serve the University of Hawaii's new West Oahu ("UHWO") campus and the surrounding developments in the Ewa Plains. The UHWO requested service in 2009. Upon analysis, HECO: (1) determined that there was insufficient load to serve the UHWO campus and the surrounding area; and (2) concluded that it should construct a new distribution substation with provisions for the installation of four distribution substation transformers within the UHWO campus, south of Farrington Highway. To achieve its objectives, HECO plans to construct new 46kV circuit extensions from its existing Waiau-Steel Mill and CEIP46 46kV circuits (which traverse along the railroad tracks that will intersect the proposed North-South Road) north to the new Kaloi Substation, and install the new 46kV circuit extensions on the existing steel poles of the Waiau-CIP 138kV Lines, Part 1, steel poles along North-South Road.

²In accordance with HRS § 269-27.5, the commission held a public hearing on July 14, 2008, at Kapolei High School Cafeteria, on Oahu ("Public Hearing"). During the scheduled Public Hearing, oral and written testimonies were received by the commission into the record of this proceeding. By commission letter dated July 15, 2008, all written testimonies received by the commission, including the written testimony of Chancellor Gene I. Awakuni, received prior to the Public Hearing, were transmitted to the parties in this docket. The transcript of the Public Hearing was filed with the commission on July 21, 2008.

1.

Project Description

The scope of the Proposed Project includes: (a) the construction of the new Kaloi Substation within the UHWO campus; (b) the overhead extension of two 46kV subtransmission lines on four new 46kV steel poles and underbuilt on the existing steel poles of the Waiau-CIP 138kV Lines, Part 1, along the new North-South Road; (c) the continuation of the two 46kV subtransmission lines in underground ducts across the North-South Road and to the new Kaloi Substation, including the installation of six 65-foot poles to riser down from the overhead installation; (d) temporarily installing eight 65-foot wooden poles and approximately 900 circuit feet of 46kV overhead lines for the two 46kV subtransmission lines; (e) the installation of approximately 500 circuit feet of 12.47kV primary underground service lines from the new Kaloi Substation to a designated demarcation point directly outside of the substation; (f) extending approximately 2,800 feet of all-dielectric self-supporting ("ADSS") telecommunications fiber in underground ducts across the North-South Road and to the new substation; (g) temporarily installing approximately 2,000 feet of ADSS telecommunications fiber; and (h) the acquisition of the land for the new Kaloi Substation and easements for all of the proposed lines.

Specifically, the Proposed Project is made up of the following capital improvement project components:

- a. P0001505 - Kaloi Substation and Installation of Kaloi Substation Transformers #1 and #2: This portion of the Proposed Project (estimated to cost approximately \$6.6 million) involves the construction of the new system distribution substation (i.e., the Kaloi Substation) along Farrington Highway within the UHWO campus. Construction of the substation includes, among other things, the installation of:
(1) two 46-12.47kV, 10/12.5MVA, low-sound transformers; (2) two 15kV metal-clad outdoor switchgear with associated microprocessor-based relay protection equipment; (3) one 46kV, 800 amp, group manual operated, disconnect switch with interrupter; (4) three 46kV, 800 amp, motor operated, disconnect switches with interrupters; 46kV bus conductors and connectors; (5) Supervisory Control and Data Acquisition/Remote Terminal Unit equipment; (6) a perimeter chain link fence with drive gates; and (7) landscaping. A complete description of the proposed work for this portion of the Proposed Project is set forth on pages 6 and 7 of the Application.

b. P0001506 - North-South Road 46kV Improvements:

This item of the Proposed Project (projected to cost approximately \$1.4 million) includes the installation of approximately 25,680 circuit feet (two 46kV circuits) of 477 KCM ACSS 46kV overhead conductors on the existing steel poles (P29 to P54A) of the Waiau-CIP 138kV Lines, Part 1, along North-South Road. Specific details regarding this item of the Proposed Project is set forth on pages 7 and 8 of the Application.

c. P0001507 - 46kV Substation Lines (underground

across the North-South Road; 46kV line to the Kaloi Substation - temporary overhead 46kV lines; and 46kV line to the Kaloi Substation - permanent underground 46kV lines): This item (estimated to cost approximately \$3.3 million) involves the extension of the CEIP46 and Waiau-Steel Mill 46kV subtransmission lines to feed the new Kaloi Substation. The two new 46kV subtransmission line extensions are planned for underground installation across the North-South Road; however, due to a conflict, the lines would be installed temporarily overhead from the Kapolei-side of North-South Road through the UHWO property to the Kaloi Substation. The underground crossing of the North-South Road would require the installation of six 65-foot wooden poles for two 46kV risers and

two switches on the Honolulu-side of North-South Road. Specifically, HECO plans to install approximately 560 circuit feet (two 46kV circuits) of 1500 KCM PEIJ 46kV underground cable in the ducts built by the Department of Transportation ("DOT") crossing under North-South Road. Due to conflicts with an existing DOT temporary 50-foot construction easement on the UHWO property, HECO intends to install temporary overhead 46kV lines from the Kapolei-side of North-South Road through the UHWO property to the Kaloi Substation.³ Upon completion of the North-South Road, HECO would, among other things, install: (a) approximately 1,100 linear feet of eight 5" 46kV ducts from the Kaloi Substation to the Kapolei-side of North-South Road to intercept the eight 5" ducts installed by the DOT; and (b) four 7'-2" x 16' manholes. A detailed description of this item of the Proposed Project is set forth on pages 8-10 of the Application.

- d. P0001554 - 12kV Substation Lines: This item (estimated to cost approximately \$300,000) involves the installation of two 12.47kV circuits within the new Kaloi Substation to the first

³However, HECO may not need to construct these temporary 46kV overhead lines if the DOT completes its construction of the North-South Road prior to December 2009.

manhole directly outside of the substation. In particular, HECO plans to install approximately 250 linear feet of twelve 5" underground ductline and approximately 500 circuit feet (two 12.47kV circuits) of 1000 KCM PEICN 12kV underground cables.

- e. P0001508 - Substation Telecomm: This item (estimated to cost approximately \$500,000) involves the installation of ADSS cable and inner-duct from Pole 54 on the Honolulu-side of North-South Road following the 46kV circuit route under North-South Road in the ducts installed by the DOT. However, due to a conflict with a DOT easement, the ADSS cable will temporarily riser up on the Kapolei-side of North-South Road along with the 46kV circuits. For the permanent underground work, approximately 1,100 linear feet of two 5"-ducts along with two 3' x 5' handholes from the Kaloi Substation to the Kapolei-side of North-South Road will be constructed for the telecomm fiber; and approximately 2,200 linear feet of ADSS will be installed in the new ducts following the underground route of the 46kV extension. Additionally, an outdoor communications cabinet for the FOCUS MUX, termination equipment and RTU equipment would also be installed at the substation.

- f. P0001504 - Transfer of Fee Simple Title and Easements: This portion of the Proposed Project (projected to cost approximately \$2.2 million) involves the transfer of fee simple title of approximately one acre of land on First Division Tax Map Key 9-1-16:parcel 129 (portion) from UHWO to the new Kaloi Substation.⁴ Details regarding this item of the Proposed Project are set forth on pages 12-13 of the Application.

2.

Project Justification

HECO represents that it received numerous service requests and inquiries during the past several years from various developments within the West Oahu area. According to HECO, "notable" future developments in the area include the following: (1) the 7,600 student UHWO campus; (2) a 16,000 residential unit development; (3) developments by the Department of Hawaiian Home Lands; and (4) retail developments in the area such as Costco,

⁴During its March 13, 2008 meeting, the University of Hawaii, Board of Regents ("UH BOR") approved the conveyance of the substation land along with the perpetual easements to HECO for the installation of the Kaloi Substation (sited on approximately 43,560 square feet of land) and the undergrounding of the 46kV lines. In July 2007, The Hallstrom Group, Inc., for the UH BOR, determined the land value of \$2,174,000 for approximately one acre of land, which HECO's independent appraiser concluded was "appropriate and reasonable." See Application at 12-13.

Target, and Walmart.⁵ HECO represents that its existing electrical system does not have adequate capacity to serve the ultimate projected loads and that it would require additional infrastructure to increase its capacity to serve the future estimated electrical loads in the area.⁶

HECO's request for approval of the Proposed Project is based on a study that it conducted to determine when additional distribution and subtransmission infrastructure capacity would be required and to determine the best alternative to provide service to the UHWO campus (i.e., the "Kaloi Study"). Aside from the anticipated increase in power needed for the UHWO campus,⁷ the study was conducted to also address the service needs of a proposed residential development (i.e., the Hunt Development project)⁸ in the area.⁹ Among other things, the Kaloi Study

⁵For transmission and distribution planning purposes, HECO conducted a Ewa Plains Long Range Master Plan Study ("Long Range Study") to "estimate the future electrical loads in the Ewa Plains area and to develop an overall plan to ensure an orderly expansion of the HECO's electrical system to serve those loads." See Application at 13. HECO represents that the Long Range Study estimates that the electrical load in the Ewa Plains area will increase from approximately 21.2MVA to an ultimate load of approximately 342.6MVA.

⁶The Long Range Study made certain recommendations based on its findings which are summarized on page 14 of the Application. Details are set forth in the Long Range Study which HECO attached as Exhibit XVI to the Application.

⁷UHWO has an anticipated electrical demand of approximately 2.2 MVA for Phase 1 of the campus. See Application at 14.

⁸The Hunt Development project has an anticipated initial load of 16.7 MVA. See Application at 14.

⁹HECO estimates that upon full build-out, the electrical load for the UHWO and the Hunt Development project would be approximately 55.0 MVA.

indicated that HECO's existing distribution capacity is inadequate to relieve the overloads through load transfers, and determined that additional distribution capacity would be required to resolve the overload conditions resulting from the forecasted load increases and to provide backup capacity by September 2009. While different alternatives were examined,¹⁰ the Kaloi Study recommended: "1) the construction of a new distribution substation within the UHWO property, with the initial installation of two 46-12kV, 10/12.5MVA distribution transformers each with two circuit radial 12kV switchgear, the installation of 12kV circuits, and future provisions for the installation of up to four 10/12.5MVA distribution transformers; and 2) the tapping and extension of the existing 46kV CEIP46 and Waiiau-Steel Mill circuits from the railroad tracks, south of the North-South Road, and underbuilding the existing 138kV circuits with the new 46kV circuit extensions on the existing steel poles along the [North-South] Road."¹¹

While the UHWO requested service in 2009, HECO represents that the project service date of July 2010 is reasonable due to, among other things, material lead times, required government permits and approvals, and scheduling conflicts with the DOT's construction of the North-South Road. However, should the UHWO campus need power prior to the projected

¹⁰See Application at 15-18.

¹¹Id. at 18. The basis for and the details regarding the recommendations are set forth in the Kaloi Study which HECO attached as Exhibit XIX to the Application.

completion date of the substation, HECO plans to take interim measures (i.e., utilizing its existing Ewa Nui Tsf 2 - Ewa Nui 2 12kV overhead circuit along Farrington Highway) to provide the campus with power ("Interim Solution").¹²

3.

HRS § 269-27.6(a)

HECO represents that the Proposed Project satisfies the requirements of HRS § 269-27.6(a).

With respect to the decision to permanently underground the 46kV subtransmission line from the Kapolei side of the North-South Road to the proposed substation, HECO states that the decision is based on various factors. According to HECO, the Final Environmental Impact Statement ("EIS") for the UHWO campus has the proposed road as the primary entryway to the campus leading to the Kaloi Plaza, an "important focal point," designed to accommodate a large amount of pedestrian activity and serve as a gathering place for both formal and informal activities. HECO contends that it is proposing to permanently underground the 46kV circuits in the area to "compliment and enhance the outdoor learning environment and to support the campus design as a gathering place for faculty and students[.]"¹³ In addition, based on meetings and discussions with UHWO, HECO determined that the UH BOR would be more inclined to grant a perpetual easement for

¹²Costs related to the Interim Solution are not included in the projected cost of the Proposed Project.

¹³See Application at 21.

the undergrounding of the 46kV circuits as opposed to overhead placement of them. HECO represents that term easements are typically granted for overhead circuits which are subject to negotiations and renewal upon termination. According to HECO, it prefers obtaining a perpetual easement for the undergrounding of circuits as opposed to overhead placement of them since it could be subject to relocation issues upon termination of the term easement, since "[c]osts to relocate the 46kV overhead circuits in the future would outweigh any potential savings in engineering and construction costs associated with an overhead line proposal."¹⁴ HECO states that the UH BOR conveyed the substation land and granted the perpetual easements for undergrounding of the 46kV circuits during its March 13, 2008 meeting. Finally, HECO contends that consideration was given to the avoided costs of the substation land in favor of supporting underground infrastructure throughout the campus.

With respect to HECO's decision to place other portions of the 46kV lines above the surface of the ground, HECO states that it should not significantly increase the visual impact in the area since there are two existing 138kV lines on the Waiiau-CIP 138kV Lines, Part 1, steel poles to which the 46kV lines would be underbuilt. In addition, HECO's Revenue Requirements Analysis compared the Proposed Project with an alternative route, installation of the 46kV circuits through Kapolei town from the CEIP Substation to the proposed new Kaloi

¹⁴Id.

Substation, primarily underground. According to HECO, the primarily underground alternative would cost approximately 2.5 times more to build than the Proposed Project (\$12.2 million versus \$4.6 million). HECO represents that it is unaware of any governmental public policy requiring the underground placement of these lines. Moreover, HECO states that it is unaware of any governmental agency or other party willing to pay for the additional costs associated with undergrounding the lines, nor is it aware of any other "relevant factors." In sum, HECO contends that "the benefits, if any, of placing the proposed overhead section of the 46kV line extensions underground do not outweigh the costs."¹⁵

Further, HECO represents that the proposed Kaloi Substation was included as part of the Final EIS dated December 2006 for the UHWO campus, which was accepted by the Governor on February 7, 2007. Finally, according to HECO, transmission and distribution projects generally are not explicitly considered during the integrated resource planning process. HECO contends that the general assumption is that new customers would be connected to the system in accordance with HECO's plan for its distribution system. In this case, the Proposed Project is being advanced to serve the projected new loads in the Ewa Plains area.

¹⁵See Application at 23.

B.

Consumer Advocate's Position

On July 22, 2008, the Consumer Advocate submitted its Statement of Position ("CA's SOP") stating that it does not object to approval of HECO's Application with certain qualifications. In general, the Consumer Advocate states that "there appears to be a need to construct additional facilities in the Ewa Plains area as there is insufficient existing distribution capacity in the area to serve the near future load requirements for the developments in the area, including the UHWO campus and Hunt Development."¹⁶ However, the Consumer Advocate expressed certain concerns with HECO's Application.

First, the Consumer Advocate notes that while HECO considered two alternatives to the Proposed Project, HECO eliminated the alternatives without performing a cost analysis of them. According to the Consumer Advocate, without such analysis it is difficult to assess the reasonableness of HECO's "assertions that the alternatives are costly and economically impractical."¹⁷ While remarking that it can "appreciate" that the Proposed Project may intuitively be the most cost-effective option since the other alternatives do not meet the load ultimately forecasted for the Kaloi Substation, the Consumer Advocate maintains that this type of analysis assumes

¹⁶See CA's SOP at 6.

¹⁷Id. at 8 (internal quotes omitted).

that the ultimate load forecasted for the new substation will materialize as projected. The Consumer Advocate contends that recent developments, reflected in the Memorandum of Understanding ("MOU") between the State and the federal Department of Energy executed on January 28, 2008, may significantly decrease HECO's current forecasts.

The Consumer Advocate states that the MOU established the Hawaii Clean Energy Initiative ("HCEI") to increase the State's self-efficiency and independency from imported oil, with an intended goal of accelerating the use of "renewable, indigenous energy resources in Hawaii while decreasing energy demand by increasing the scale and rate of renewable energy and energy efficiency technology market adoption . . . with an overall goal to meet the State's energy needs using 70% clean energy by the year 2030."¹⁸ While recognizing that the specific outcomes and actions of the HCEI are presently being discussed and that it may be premature to assess the impact of the HCEI on HECO's forecasted demands, the Consumer Advocate states that it believes that there may be significant adverse affects if the HCEI impacts are not taken into consideration. Adverse consequences of not considering the effects of HCEI include, according to the Consumer Advocate: (1) utility plant being under-utilized or not used at all as forecasted load does not materialize or existing load decreases; and (2) HCEI decisions

¹⁸Id. at 9 (internal quotes omitted).

being limited or driven by the desire to cost-effectively utilize HECO's infrastructure that is currently in place.

However, the Consumer Advocate concludes that there are several factors that mitigate, to an extent, the present concerns with constructing the Kaloi Substation. The mitigating factors discussed by the Consumer Advocate are as follows:

- There does not appear to be sufficient capacity in HECO's existing distribution system in the project area to allow HECO to meet the near future customer load requirements.
- In HECO's Long Range Study, the Kaloi Substation is the first of seven new substations in the Ewa Plains area that HECO is planning to construct. The Consumer Advocate anticipates that HECO will re-evaluate its plans to construct the other six substations as specific outcomes and goals of the HCEI develop.
- There may be insufficient time for HECO to pursue any other alternative to meet the service date for the UHWO campus and the Hunt Development.

Based on the above, the Consumer Advocate states that it does not object to the commitment of funds for the construction of the Kaloi Substation at this time. However, the Consumer Advocate asserts that it anticipates that HECO would include an assessment of how future capital improvement projects are reasonable in light of the HCEI and the State's movement toward energy

self-sufficiency when seeking commission approval to commit funds for such projects and/or in its integrated resource planning ("IRP") process.

Second, while not objecting to HECO's plans to underground portions of the 46kV line extensions used to serve the Kaloi Substation as set forth in the Application, the Consumer Advocate notes certain concerns. According to the Consumer Advocate, the underground section of the 46kV line extensions are comprised of two parts -- first, through the new Kaloi Substation through the UHWO property pursuant to the request of the UHWO and, second, through the DOT property from the North-South Road side of manhole no. 2 to the poles on the Kapolei side of the North-South Road. With regards to the extensions through the UHWO property, the Consumer Advocate states that there is a cost benefit of placing this portion of the lines underground, since there appears to be an avoided cost amount of approximately \$656,612 for the substation land in favor of supporting the placement of the lines underground through the campus.¹⁹ However, noting that the perpetual easements and conveyance documents for the substation between UHWO and HECO have not been finalized, the Consumer Advocate recommends that HECO file these documents for review upon completion of them.

¹⁹According to the Consumer Advocate, "[t]he avoided cost[] appears to be the difference in the cost between what HECO would have expended for the land for the substation property, which is valued at \$2,174,000 as compared to the amount UHWO would have contributed to placing the 46kV line extensions underground pursuant to HECO's Tariff Rule No. 13.D.1, which is estimated at \$1,517,388." See CA's SOP at 13 (references omitted).

Additionally, HECO is constructing the 46kV line extensions underground through the DOT property pursuant to the DOT's "preference" to prohibit overhead utilities from crossing the North-South Road. On this matter, the Consumer Advocate states that while it appreciates HECO's efforts to accommodate the preferences of the DOT and the communities, it is concerned that these entities are not contributing to the cost of undergrounding this section of the 46kV line as set forth in HECO's rules and policies. Moreover, the Consumer Advocate is concerned that the 46kV line extensions would later need to be relocated to the extent that the mass transit system is placed in a location that would obstruct HECO's maintenance of the underground system. Nevertheless, the Consumer Advocate states that it will not object to the underground placement of this section of the 46kV line extensions since it is being done to meet the requirements of the DOT which owns the easement area.²⁰

With regards to the remaining sections of the 46kV line extensions, which HECO plans as overhead facilities, the Consumer Advocate considered the five criteria set forth in HRS § 269-27.6. In addition to the factors articulated by HECO, which the Consumer Advocate notes,²¹ the Consumer Advocate further

²⁰However, the Consumer Advocate states that it "believes that to the extent that DOT continues to request the underground placement of facilities at their preference without a contribution, further review of such requests will be necessary as HECO's ratepayers may be harmed by incurring costs for facilities that should be borne by the requestor (i.e., the cost causer)." See CA's SOP at 15.

²¹Id. at 16-17.

states that it is not aware of any Federal, State, or County requirements that would result in the need to place the facilities underground. The Consumer Advocate also notes that the only attendee representing UHWO at the Public Hearing presented testimony in support of HECO's Application. Based on its review, the Consumer Advocate states that "it does not appear [that] there is a benefit to placing the 46kV line extensions in the primarily underground alternative route."²²

Finally, the Consumer Advocate notes certain concerns regarding the estimated costs of the Proposed Project. The Consumer Advocate states that HECO's estimate for "Outside Services" costs is an estimate that may significantly change as a result of the actual bid proposals since the project has not yet gone out for competitive bidding. Moreover, the Consumer Advocate states that it has questions regarding the calculations made to determine the estimated "On-Cost" for the Proposed Project based on its review of the basis of HECO's calculations. However, the Consumer Advocate recognizes that these cost concerns can be pursued more appropriately when the final cost report is submitted or in HECO's next rate case proceeding, as necessary. The Consumer Advocate specifically notes that it "can review and better quantify the reasonableness of the actual costs incurred to complete the project and pursue

²²Id. at 17.

issues, if any, regarding the reasonableness of the instant project's actual costs in HECO's next rate proceeding."²³

II.

Discussion

A.

General Order No. 7 Review

Paragraph 2.3.g.2 of General Order No. 7 states, in relevant part:

Proposed capital expenditures for any single project related to plant replacement, expansion or modernization, in excess of \$[2.5 million] or 10 percent of the total plant in service, whichever is less, shall be submitted to the [c]ommission for review at least 60 days prior to the commencement of construction or commitment for expenditure, whichever is earlier²⁴

Upon review, the commission will approve, in this instance, the proposed expenditure of funds. The commission finds HECO's justifications for the Proposed Project to be reasonable under the circumstances. Primarily, there appears to be a need for the new Kaloi Substation. Based on HECO's estimates, HECO currently does not have the distribution capacity to satisfy the projected demand in the area, including requests for service made by the UHWO and the Hunt Development. As set forth in the Long Range Study, HECO estimates that electrical

²³Id. at 19.

²⁴The commission, in Docket No. 03-0257, increased the monetary threshold governing the filing of capital expenditure applications by HECO, from \$500,000 to \$2.5 million, exclusive of customer contributions, effective July 1, 2004. See Decision and Order No. 21002, filed on May 27, 2004.

load in the Ewa Plains area will increase from approximately 21.2MVA to an ultimate load of approximately 342.6MVA.²⁵ The current expected load increase in the area is significant. However, the commission shares the Consumer Advocate's concern that HECO may have not appropriately considered the impacts of the HCEI in its estimate of load growth in the area. Nonetheless, as articulated by the Consumer Advocate, circumstances exist to mitigate this concern including, among other things, the apparent need for the additional distribution system to meet customer load requirements in the near future, and the recognition that the Kaloi Substation is only the first of seven new substations HECO is planning to construct in the area. Moreover, to address this concern, the commission finds it reasonable to require HECO to include an assessment of how future capital improvement projects are reasonable in light of the HCEI and the State's movement towards self-sufficiency when it seeks commission approval of such projects in the future.²⁶

Based on the foregoing, the commission concludes that HECO's request to commit approximately \$14.3 million (excluding customer contributions) for the purchase, construction, and installation of Item Y00119, the Kaloi Substation,

²⁵See Application at 13.

²⁶In its SOP, the Consumer Advocate discussed how it "anticipates" that HECO would provide an assessment of the reasonableness of future capital improvement projects in light of HCEI and the State's movement towards self-sufficiency when it seeks commission approval of them or in its IRP proceeding. See CA's SOP at 11. At this time, however, the commission finds it reasonable, on a going forward basis, to require that such an assessment be conducted regarding capital improvement projects each time HECO files for commission approval of them.

Kaloi Transformers #1 and #2, associated 46kV and 12kV circuits, and related equipment, easements, and land, should be approved. The commission also concludes that HECO should, on a going forward basis, be required to provide an assessment regarding the reasonableness of future capital improvement projects in light of the HCEI and the State's movement towards self-sufficiency when it seeks approval of such projects in the future.

B.

HRS § 269-27.6(a) Determination

HRS § 269-27.6(a) titled "Construction of high-voltage electric transmission lines; overhead or underground construction" states:

Notwithstanding any law to the contrary, whenever a public utility applies to the public utilities commission for approval to place, construct, erect, or otherwise build a new forty-six kilovolt or greater high voltage electric transmission system, either above or below the surface of the ground, the public utilities commission shall determine whether the electric transmission system shall be placed, constructed, erected, or built above or below the surface of the ground; provided that in its determination, the public utilities commission shall consider:

- (1) Whether a benefit exists that outweighs the costs of placing the electric transmission system underground;
- (2) Whether there is a governmental public policy requiring the electric transmission system to be placed, constructed, erected, or built underground, and the governmental agency establishing the policy commits funds for the additional costs of undergrounding;
- (3) Whether any governmental agency or other parties are willing to pay for the additional costs of undergrounding;

(4) The recommendation of the division of consumer advocacy of the department of commerce and consumer affairs, which shall be based on an evaluation of the factors set forth under this subsection; and

(5) Any other relevant factors.

HRS § 269-27.6(a).

First, under HRS § 269-27.6(a)(1), the commission finds that no benefit exists that outweighs the costs associated with constructing the lines primarily underground. According to HECO, the primarily underground alternative would cost approximately \$12.2 million, roughly 2.5 times more than the \$4.6 million projected for this portion of the Proposed Project. In addition, the visual impact of placing the proposed 46kV line extensions along the North-South Road would be minimal since it is routed on an existing HECO pole-line (i.e., the Waiau-CIP 138kV Lines, Part 1). Thus, there does not appear to be a benefit that outweighs the additional costs of placing the 46kV line extensions of the Proposed Project primarily underground.

Second, under HRS § 269-27.6(a)(2), the commission is unaware of any governmental policies requiring the underground placement of the 46kV line extensions.²⁷

Third, under HRS § 269-27.6(a)(3), the commission is unaware of any governmental agency or any other party willing to pay for the additional costs of placing the line extensions of the Proposed Project primarily underground.

²⁷See also CA's SOP at 17.

Fourth, under HRS § 269-27.6(a)(4), the commission recognizes that the Consumer Advocate, after considering the Proposed Project under HRS § 269-27.6(a), states that it "does not appear [that] there is a benefit to placing the 46kV line extensions in the primarily underground alternative route."²⁸

Lastly, under HRS § 269-27.6(a)(5), the commission concurs with HECO's assessment that there appears to be no other "relevant factors" to consider at this time.

Moreover, HECO's proposal to underground portions of the 46kV line extensions appear, under the circumstances, to be appropriate. Among other things, there appears to be a cost benefit of placing the line extensions underground through the UHWO campus given the avoided costs of the substation land (provided by the university) in favor of supporting underground infrastructure through the campus, estimated to be approximately \$656,612.²⁹ HECO's decision to underground this portion of the line extensions also supports the campus design as set forth in the Final EIS for the UHWO campus and is consistent with the March 13, 2008 UH BOR's decisions to convey the substation lands and grant the required easements. The other portion of the line extensions are being placed underground pursuant to the DOT's "preference" regarding construction of the North-South Road, the easement for which is owned by the DOT. However, the commission shares the Consumer Advocate's concern regarding requests to

²⁸Id.

²⁹See Application at 22; CA's SOP at 15.

place lines underground by the DOT without contributing to the costs; and concurs with the Consumer Advocate's statement that, to the extent that the DOT continues to make such requests, further review of them will be necessary to ensure HECO's ratepayers are not harmed. In this case, the commission will accept HECO's proposal to underground this portion of circuits since, among other things, HECO needs to cross the North-South Road.³⁰ Nonetheless, HECO should, in its next rate case proceeding, be prepared to further justify why doing so without a contribution is reasonable and in the public interest. Furthermore, the commission finds reasonable the Consumer Advocate's recommendation that the perpetual easements and land conveyance documents for the substation between HECO and the UHWO should be filed for review, once they have been completed and finalized. Accordingly, the commission will adopt this filing recommendation.

Based on the foregoing, the commission concludes that HECO's proposal for the construction of the temporary and permanent overhead and permanent underground subtransmission lines, as set forth in its Application, is appropriate and should be approved. Additionally, HECO should be required to file appropriate copies of the completed and finalized perpetual easements and land conveyance documents for the substation between HECO and the UHWO.

³⁰See HECO's Response to CA-IR-2, filed on July 7, 2008.

III.

Orders

THE COMMISSION ORDERS:

1. HECO's request to expend approximately \$14.3 million (excluding customer contributions) for Item Y00119, for its new Kaloi Substation, as described in its Application, is approved; provided that no part of the project may be included in HECO's rate base unless and until the project is in fact installed, and is used and useful for utility purposes.

2. HECO's proposal for the construction of the temporary and permanent overhead and permanent underground subtransmission lines, in the manner set forth in the Application, is approved, pursuant to HRS § 269-27.6(a).

3. Within 60 days of the completion of the Proposed Project, HECO shall submit an accounting report with an explanation of any deviation of 10% or more of the projected costs for the Proposed Project. Failure to submit the report constitutes cause to limit the total cost of the Proposed Project for ratemaking purposes to that estimated in HECO's Application.

4. On a going forward basis, HECO shall provide an assessment regarding the reasonableness of future capital improvement projects in light of the HCEI and the State's movement towards self-sufficiency when it seeks approval of such projects in the future.

5. As soon as reasonably feasible, HECO shall file appropriate copies of the completed and finalized perpetual

easements and land conveyance documents between HECO and the UHWO with service on the Consumer Advocate.


6. Unless ordered otherwise by the commission, this docket is deemed closed upon HECO's compliance with the requirements of paragraph nos. 3 and 5, above.

DONE at Honolulu, Hawaii AUG 14 2008.

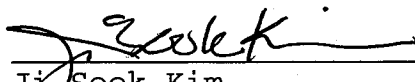
PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By: 
Carlito P. Caliboso, Chairman

By: 
John E. Cole, Commissioner

By: 
Leslie H. Kondo, Commissioner

APPROVED AS TO FORM:


Ji Sook Kim
Commission Counsel

2008-0070.sl

CERTIFICATE OF SERVICE

The foregoing order was served on the date of filing by mail, postage prepaid, and properly addressed to the following parties:

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